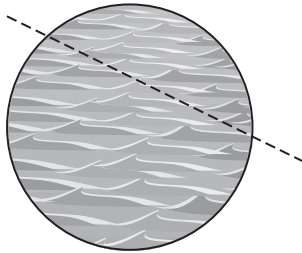


**10-1 Word Problem Practice****Circles and Circumference**

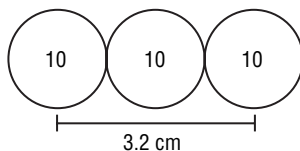
- 1. WHEELS** Zack is designing wheels for a concept car. The diameter of the wheel is 18 inches. Zack wants to make spokes in the wheel that run from the center of the wheel to the rim. In other words, each spoke is a radius of the wheel. How long are these spokes?

- 2. CAKE CUTTING** Kathy slices through a circular cake. The cake has a diameter of 14 inches. The slice that Kathy made is straight and has a length of 11 inches.



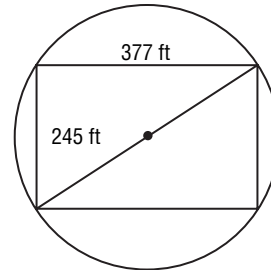
Did Kathy cut along a *radius*, a *diameter*, or a *chord* of the circle?

- 3. COINS** Three identical circular coins are lined up in a row as shown.



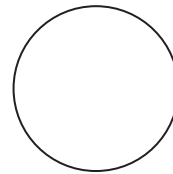
The distance between the centers of the first and third coins is 3.2 centimeters. What is the radius of one of these coins?

- 4. PLAZAS** A rectangular plaza has a surrounding circular fence. The diagonals of the rectangle pass from one point on the fence through the center of the circle to another point on the fence.



Based on the information in the figure, what is the diameter of the fence? Round your answer to the nearest tenth of a foot.

- 5. EXERCISE HOOPS** Taiga wants to make a circular loop that he can twirl around his body for exercise. He will use a tube that is 2.5 meters long.



- What will be the diameter of Taiga's exercise hoop? Round your answer to the nearest thousandth of a meter.
- What will be the radius of Taiga's exercise hoop? Round your answer to the nearest thousandth of a meter.